

Title (en)
Haloporphyrins and their preparation

Title (de)
Haloporphyrine und Verfahren zu ihrer Herstellung

Title (fr)
Haloporphyrines et procédé pour leur préparation

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Application
EP 95306230 A 19950906

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Abstract (en)
The invention provides novel catalyst compositions, useful in the oxidation of hydrocarbons with air or oxygen to form hydroxy-group containing compounds and in the decomposition of hydroperoxides to form hydroxy-group containing compounds. The catalysts comprise transition metal complexes of a porphyrin ring having 1 to 12 halogen substituents on the porphyrin ring, at least one of said halogens being in a meso position and/or the catalyst containing no aryl group in a meso position., The compositions are prepared by halogenating a transition metal complex of a porphyrin. In one embodiment, a complex of a porphyrin with a metal whose porphyrin complexes are not active for oxidation of hydrocarbons is halogenated, thereby to obtain a haloporphyrin complex of that metal, the metal is removed from the haloporphyrin complex to obtain the free base form of the haloporphyrin, and a metal such as iron whose porphyrin complexes are active for oxidation of hydrocarbons and for the decomposition of alkyl hydroperoxides is complexed with the free base to obtain an active catalyst for oxidation of hydrocarbons and decomposition of alkyl hydroperoxides.

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